

ANOSHCHENKO, N.D., prof.

The leading four. Grashd. av. 17 no.8:9-12 Ag '60. (MIRA 13:9)
(Airplanes--Design and construction)

BAKHUR, V.T.; ANOSHENKOV, T.I. (L'vov)

Pathogenesis of paroxysmal paralysis. Zhur.nevr.i psich. 60
no.9:1106-1110 '60. (MIRA 14:1)
(PARALYSIS, SPASTIC)

ANALYST: V. V. TIKHONOV, K. S.

Effect of hardening on the temperature characteristics of
magnetic transformer steels (22, 23, 24, 25, 26, 27,
28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42,
43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62).
(NIPK 1748)

I. M. Mekhovskiy (Institute of Physics, Kiev).

ANOSHIN, A.V.

Manufacture of automobile bodies of glass-reinforced plastics
abroad. Avt.prom. 30 no.2:41-44 F '64. (MIRA 17:4)

LADYNINA, I.N.; ANOSHIN, G.N.

Some characteristics of the distribution of rubidium, thallium, and
bromine in the process of the formation of potassium salt deposits.
Geol. i geofiz. no.3:64-74 '62. (MIRA 15:7)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
(Potassium salts)

PESHACHEVITSKIY, B.I.; ANOSHIN, G.N.; YERENBURG, A.M.

Chemical forms of gold in sea water. Dokl. AN SSSR 162 no.4;915-917
Jo '65. (MIRA 18:5)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN
SSSR i Institut geologii i geofiziki Sibirskogo otdeleniya
AN SSSR. Submitted January 8, 1965.

ANOCHIN, G.N.; POTAP'YEV, V.V.

Alkalies and mineralizing agents (R,F) in the granites of the
Kolyvan Massif. Geot. i geofiz. no.7:11-26 '65. (MIRA 18:9)

I. Institut geologii i geofiziki Sibirskego otdeleniya AN
SSSR, Novosibirsk.

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000101710009-2

ADAMOVICH, V. M.

ALEKSEEV, I. N. - "INVESTIGATION OF AFFAIRS WITH EARTHTONES" (DRAFT OF THE REPORT ON THE INVESTIGATION OF THE AFFAIRS WITH EARTHTONES, WHICH WAS PREPARED BY THE POLYGRAPHIC INSTITUTE OF THE USSR (DEPARTMENT OF THE DEPARTMENT OF CANDIDATE IN TECHNICAL SCIENCE))

See: VECHERNAYA PESENKA, JANUARY-DECEMBER 1922

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000101710009-2"

ANOSHIN, I.M.

Effect of sieve plate sizes on the efficiency of rectification processes.
Spirit.prom. 20 no.2:9-13 '54.
(Distillation) (MLRA 7:6)

ANOSHIN, I.M.

Intensification of heat exchange and mass transfer processes in
blade-type rectifier-absorber. Trudy KIPP no.16:51-54 '57.
(MIRA 12:7)

1. Krasnodarskiy institut pishchevoy promyshlennosti, Mekhaniko-
chemicheskiy fakul'tet, kafedra protsessov i apparatov,
(Heat--Radiation and absorption)
(Mass transfer)

ANOSHIN, I.M.

Methods for calculating rectification and absorption equipment.
Izv. vys. ucheb. zav.; pishch. tekhn. no.3:100-110 '60. (MIRA 14:8)

1. Krasnodarskiy institut pishchevoy promyshlennosti, Kafedra
prosessov i apparatov pishchevykh proizvodstv.
(Distillation apparatus) (Absorption)

ANOSHIN, I.M.

Mass transfer coefficients in the process of rectification on perforated plates. Izv. vys. ucheb. zav.; pishch. tekhn. no.5:131-134 '61. (MIRA 15:1)

1. Krasnodarskiy institut pishchevoy promyshlennosti. Kafedra protsessov i apparatov.
(Mass transfer) (Distillation apparatus)

ANOSHIN, I.M.

Modeling of the mass transfer process in a two-phase flow. Izv.vys.
ucheb.zav.; pishch.tekh. no.5:105-109 '63. (MIRA 16:12)

1. Krasnodarskiy politekhnicheskiy institut, kafedra protsessov
i apparatov.

ANOSHIN, I.M.

Rotary apparatus for alcohol rectification. Ferm. i sirt.
prom. 30 no.1:21-24 '64. (MIRA 17:11)

1. Krasnodarskiy politekhnicheskiy institut pishchevoy promyshlennosti.

BUKOVIN, I. N.; IVANOV, G. V.

"A hydrodynamic and mass-transfer investigation of rectifiers of the rotor type with plane disks."

report submitted for all-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Krasnodar' Inst of Food Ind.

ACC NR: AP7000441

(A)

SOURCE CODE: UR/0322/66/000/005/0133/0137

AUTHOR: Anoshin, I. M.; Kochubey, Yu. I.

ORG: Krasnodar Polytechnic Institute (Krasnodarskiy politekhnicheskiy institut)

TITLE: Increasing the flow velocities in a vertical rotary apparatus

SOURCE: IVUZ. Pishchevaya tekhnologiya, no. 5, 1966, 133-137

TOPIC TAGS: mass transfer, flow rate, absorption coefficient, rotation

ABSTRACT: Investigation of mass transfer processes in rotary absorbers and rectifiers has shown that they have significantly different capacities, due to turbulentizing of the phases by the introduction of mechanical energy. It has been shown that the rate of mass transfer in different zones of the active space is not identical. In these cases, steady state films cannot exist, and the rate of molecular transfer is considerably less than the rate of turbulent transfer. The article describes the design of a laboratory model of an apparatus of the labyrinth type; whose geometric dimensions are such that all the active space is utilized. The construction of the apparatus is shown in Figure 1. Rotating plates of conical form with concentrically arranged rings, 2, are attached to vertical shaft, 1. The distance between rings is not identical, but increases toward the center; however, the areas between rings are equal, and are 77.6 cm². An immovable cone, 4, is attached to the housing, 3. On the surface of the

Card 1/2

UDC: 66.048.3

ACC NR: AP7000441

housing, there are fastened four channels, 6, which end in overflow openings to whose ends there are attached the cones, 8. On the inner surface of the immovable cone, 4, are attached rings which, together with the rings of the rotating plates, form a labyrinthine channel. This construction makes it possible to achieve a maximum capacity of the apparatus with minimum dimension. Orig. art. has: 3 figures.

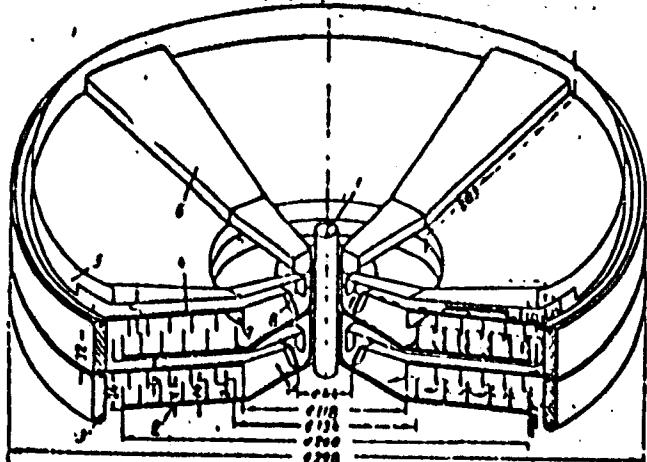


Figure 1.

SUB CODE: 20/ SUBM DATE: 10Mar65/ ORIG REF: 005
Card 2/2

COUNTRY: USSR X
CAT. NO.: Forestry. General Problems.
ARS. VOL.: Leningr., No. 4, 1952, No. 1952
AUTHOR: Zinov'ev, V.S.
TITLE: Disk Dept. of the Geographical Society USSR
SUBJECT: Distribution of coniferous forests in southern
Siberian steppes.
BRIG. SUB.: Izv. Omskogo otd. Geogr. o-va SSSR, 1957, vyp. 2
(9), 134
ABSTRACT: The large forest areas of Siberia disappeared
long ago in certain districts, and were formed by
birch and aspen with a small admixture of armen
and willow underwood. At the beginning of
the 19th century, only an insignificant birch
plantation remains on the area. At the center
of the steppes one pine grove with a surface of
40 ha's remains between the villages of
Krasnaya, Setkulovka, and Podgostvenko and
several miles on areas of felled forests.
C.R.: -- Ye.N. Sabin
1/1

ANOSHIN, V.A.; VASSERMAN, B. Ya.; SAZONOV, N.V.

New data on the oil and gas potentials of carbonate sediments
in the southern part of the Timan-Pechora area. Neftgaz, geol.
i geofiz. no.4:39-42 '63 (MIRA 17:7)

1. Voyvozhneftegazrasvedka.

ARTOBOL'EVSKIY, S.I., professor, doktor tekhnicheskikh nauk; ANOSHINA, K.I.,
redaktor; GRIBOVA, M.P., tekhnicheskiy redaktor

[Laboratories for instruction in the theory of mechanisms and
machines; visual aids, equipment and description of laboratory work]
Uchebnaia laboratoriia po teorii mekhanizmov i mashin; nagliadnye
posobiiia, oborudovanie i opisanie laboratornykh rabot. Moskva, Gos.
izd-vo "Sovetskaiia nauka," 1952. 149 p. (MLRA 10:2)

(Machinery)

(Engineering laboratories--Apparatus and supplies)

BERRI, R.Ya., dotsent; KOZYLYAYEV, P.A., dotsent; LUNTS, G.L., dotsent;
LIBIN, M.L., starshiy prepodavatel'; ROZENTAL', M.I., assistent.
Prinimali uchastiye: PUKS, B.A., prof.; VOYEKHOVA, S.V., dotsent;
KOZITSIN, V.I., dotsent; TEUSH, V.L., dotsent. ANOSHINA, K.I.,
red.; KUZ'MINA, N.S., tekhn.red.

[Higher mathematics; instructions and control problems for students
specializing in agriculture, fish culture, and forestry in upper-
level correspondence schools (departments)] Vysshiaia matematika;
metodicheskie ukazaniia i kontrol'nye zadaniia dlja studentov sel'-
okhodisiaistvennykh, rybokhodisiaistvennykh i lesokhodisiaistvennykh
spetsial'nostei zaochnykh vysshikh uchebnykh zavedenii (fakul'tetov).
Pod red. G.L.Luntsa. Moskva, Gos.izd-vo "Sovetskaja nauka," 1958.
90 p. (MIRA 12:4)

1. Russia (1923- U.S.S.R.) Ministerstvo vysshego obrazovaniya.
Metodicheskoye upravleniye.
(Mathematics)

TKUSH, Benjamin Lvovich, MACHERET, Ya.A., red.; ANOSHINA, K.I., red.;
SILLYK, M.D., tekhn.red.

[Course in higher mathematics] Kurs vyshei matematiki. Moskva,
Gos. izd-vo "Sovetskaya nauka," 1958. 269 p. (MIRA 11:8)
(Mathematics)

KARYAKIN, Nikolay Ivanovich, prof., doktor tekhn.nauk; ANOSHINA, K.I.,
red.; MULIKOVA, I.F., tekhn.red.

[Principles of the design of thin-walled structures; strength,
stability, and vibrations] Osnovy rascheta tonkostennnykh
konstruktsii; prochnost', ustoichivost' i kolebaniia. Moskva,
Gos.izd-vo "Vysshais shkola," 1960. 238 p.

(Elastic rods and wires) (Structures, Theory of)
(MIRA 13:11)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4,
pp 72-73 (USSR) 15-57-4-4509

AUTHORS: Perg, L. G., Anoshina, N. P.

TITLE: Gas-Volumetric Analysis of Carbonate Rocks (Gazovolumetricheskiy analiz karbonatnykh porod)

PERIODICAL: Tr. Kazansk. fil. AN SSSR, ser. khim. n., 1956, Nr 3,
pp 31-36

ABSTRACT: The authors describe an apparatus for analyzing carbonate rocks (calcite, dolomite, and magnesite) by collecting the carbon dioxide gas given off during heating. During the thermal dissociation of dolomite, CO₂ is expelled at 650° to 700°; during the dissociation of calcite, CO₂ comes off at 880° to 910°. By measuring the volume of carbon dioxide at these temperatures, it is possible to calculate the content of the minerals in the rock. The procedure of making the analysis is described and a nomogram is furnished for calculating the dolomite content of rocks.

V. G. R.

Card 1/1

BERG, L.A.; MOCHALOV, K.N.; KURENKOVA, P.A.; ANOSHINA, N.P.

Thermographic investigations of bromoplatinic acid. Izv.Kazan.
fil. AN SSSR.Ser.khim.nauk no.4:127-132 '57. (MIRA 12:5)
(Bromoplatinic acid)
(Thermochemistry)

BERG, L.G.; ANOSHINA, N.P.

One volumetric determination of boric acid. Izv.Kazan.fil.
AN SSSR. Ser.khim.nauk no.6:198-204 '61. (MIRA 16:5)
(Boric acid) (Titration)

BERG, L.G.; ANOSHINA, N.P.

Thermography and gas volumetry as a method of phase analysis of
building and binding materials. Izv.Kazan.fil. AN SSSR.
Ser.khim.nauk no.6:198-204 '61. (MIRA 16:5)
(Building materials) (Thermal analysis) (Titration)

TEYTEL' BAUM, B.Ya.; YAGFAROV, T.A.; ANOSHINA, N.P.; NAUMOV, V.A.

Complex investigation of the crystallization of nairit, a
polychloroprene rubber. Dokl. AN SSSR 150 no.3:608-611 My '63.
(MIRA 16:6)

1. Khimicheskiy institut im. A.Ye. Arbusova i Institut
organicheskoy khimii AN SSSR, Kazan'. Predstavлено akademikom
B.A. Arbusovym.

(Chloroprene) (Crystallization)

TSYFEL'DBAKH, B. Ya.; ANOSHINA, N. P.

Thermographic study of the low-temperature crystallization of
natural rubber. Dokl. AN SSSR 156 no. 1:145-48 My '64.
(MIRA 17:5)

1. Khimicheskiy institut im. A. Ye. Arbuzova AN SSSR.
Predstavлено akademikom B. A. Arbuzovym.

ACCESSION NR: AP4042215

S/0020/64/157/002/0433/0436

AUTHOR: Cubanov, E. P.; Anoshina, N. P.; Teytel'baum, B. Ya.

TITLE: Effect of mastication on the crystallization processes in natural rubber

SOURCE: AN SSSR. Doklady*, v. 157, no. 2, 1964, 433-436

TOPIC TAGS: rubber, natural rubber, rubber crystallization, rubber mastication, deformation curve, isothermal deformation curve, thermographic curve, chain length, primary structure

ABSTRACT: The crystallization processes in masticated specimens of natural rubber have been studied by recording isothermal-deformation curves and by thermography. The experiments were conducted with specimens of smoked sheet rubber masticated in air at 45—50°C on a laboratory mill for 5, 10, 20, 40, and 60 min. Deformation curves recorded under alternating loads of 7.04 and 0.64 kg/cm² at ~25°C (optimum crystallization temperature) are given in Fig. 1 of the Enclosure. The thermographic curves were recorded with a PK-52

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ACCESSION NR: AP4042215

pyrometer. The specimens were first heated to 50—55°C, then crystallized at -25°C, and finally cooled to below -50°C. The recording was conducted during a steady temperature increase at the rate of 2 deg./min. The degree of crystallization of the specimens was evaluated by the area values of the endothermal effects, Q_{melt} , which correspond to the melting of the crystal phase. The dependence of Q_{melt} on the duration of mastication is given in Fig. 2. The results of the study indicate that mastication of natural rubber definitely affects the process of its low-temperature crystallization. An attempt is made to explain this phenomenon by evaluating factors which affect the origination and growth of crystals, such as decrease of the chain length and destruction of regular primary structures (bundles). The importance of similar studies of other crystallizing rubbers is stressed. Orig. art. has: 4 figures.

ASSOCIATION: Khimicheskiy institut im. A. Ye. Arbuzova Akademii nauk SSSR (Chemical Institute, Academy of Sciences, SSSR); Institut organicheskoy khimii Akademii nauk SSSR, Kazan (Institute of Organic Chemistry, Academy of Sciences, SSSR)

Card 2/5

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CIA-RDP86-00513R000101710009-2

ACCESSION NR: AP4042215

SUBMITTED: 06Mar64

ATD PRESS: 3073

ENCL: 02

SUB CODE: MT, SS

NO REF Sov: 005

OTHER: 001

Card 3/5.

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000101710009-2"

ACCESSION NR: AP4042215

ENCLOSURE: 01

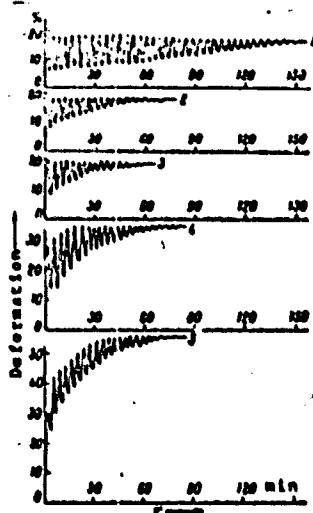


Fig. 1. Isothermal deformation curves at -25°C

1 - Initial rubber; 2, 3, 4, and 5 - the same rubber masticated for 5, 10, 40, and 60 min.

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ACCESSION NR: AP4042215

ENCLOSURE: 02

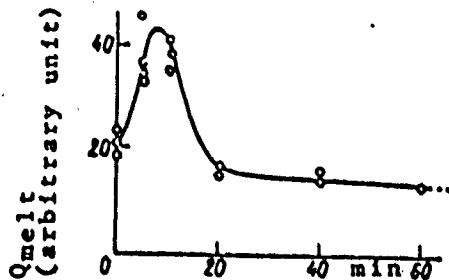


Fig. 2. Dependence of Q_{melt} , which is proportional to the quantity of the crystalline phase formed at -25C for 1 hr, on the mastication time.

Card 5/5

ACCESSION NR: AP4035819

8/0020/64/156/001/0145/0148

AUTHOR: Tuytel'baum, B. Ya.; Anoshina, N. P.

TITLE: Differential thermal analysis of low temperature crystallization of natural rubber.

SOURCE: AN SSSR. Doklady*, v. 156, no. 1, 1964, 145-148

TOPIC TAGS: natural rubber, crystallization, differential thermal analysis

ABSTRACT: The purpose of this investigation was to find any crystalline phases on the differential thermal analysis (DTA) curves and to develop a DTA method for following the crystallization process. A recent publication treated DTA of the melting of crystalline phases in gutta-percha, balata, natural rubber and synthetic rubber [W. Cooper and R. K. Smith, J. Polym. Sci. A., 1, 159 (1963)]. The obtained results, however, for natural rubber were very indefinite. In this work cooling curves were recorded on a Kurnakov pyrometer PK-52 with chromel-alumel thermocouples. Synthetic rubbers SKM and SKLD were used as standards since they display no thermal effects in the investigated temperature region. Heating of samples was conducted in a massive aluminum block, furnished with a long protrusion

Card

1/2

GUBANOV, E.P.; AKOSHINA, N.P.; TRYTEL'BAUM, R.Ya.

Crystallization of natural rubber as influenced by plasticization.
Dokl. AN SSSR 157 no. 2, 433-436 J1 '64. (MIRA 171?)

I. Khimicheskiy institut imeni A.Ye. Arbusova AN SSSR i Institut
organicheskoy khimii AN SSSR, Kazan'. Predstavлено akademikom
B.A. Arbusovym.

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000101710009-2

STUDY OF THE EFFECTS OF VARIOUS STABILIZERS ON THE STRENGTH OF THE BAGGAGE AND THE PARTIAL

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CIA-RDP86-00513R000101710009-2

A. S. LEVY, R. M. SIEGMUND, AND J. C. WILSON

The control resulted in the end product of 16.24 g/t.

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CIA-RDP86-00513R000101710009-2"

AYTEL'BAUM, B.Ya.; ANOSHINA, N.P.

Thermographic study of the crystallization of nairit MP, a chloroprene
rubber. Vysokom. soed. 7 no.6:978-983 Je '65. (MIRA 18:9)

I. Khimicheskiy institut imeni A.Ye. Arbusova AN SSSR.

TEYTEL'BAUM, B.Ya.; ANOSHINA, N.P.

Thermographic study of the crystallization of stereoregular butadiene
SKD rubber. Vysokom. soed. 7 no.7:1188-1191 Jl '65.

(MIRA 18:8)

1. Khimicheskiy institut imeni Arbuzova AN SSSR.

SHURYGIN, V.P., kand.tekhn.nauk; IVANTSOV, M.G., inzh.; KLYMAN,
V.M., inzh.; MATSNEV, N.F., inzh.; FINTUSHAL', F.V., inzh.;
MUKHANOV, M.A., inzh.; NIKOLAEV, N.P., inzh.; ANOSHKIN,
A.I., inzh.; PILIPENKO, M.P., mekhanizator SMP-205; SAVIN,
V.D., mokhanizator SMP-205

"Ovor-all mechanization of construction in railroad electri-
fication" by A.P. Alekseev. Reviewed by V.P. Shurygin and
others. Transp. stroi. 11 no.8:59-60 Ag '61. (MIRA 14:9)
(Railroads--Electrification)
(Alekseev, A.P.)

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000101710009-2

VAULIN, V.A.; POHANZAN, I.F.; ANOSHKIN, A.M.; POPKOV, Yu.L.

Using deep holes in breaking ores in shrinkage stoping.
Biul.tekh.-ekon.inform. no.8:5-7 '59. (MIRA 13:1)
(Stoping(Mining))

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000101710009-2"

ANCSHKIN, I. (Khotimskiy rayon, Mogilevskaya oblast')

Against the wind. Rab.i sial. 36 no.1:11 Ja '60.
(MIRA 13:5)
(Khotimsk District--Women as letter carriers)

ANOSKIN, N. F.

On the Possibility of Increasing of Increasing of Degree of Reduction in the
Cold Rolling of Aluminum"

Light Alloys. no. 1: Physical Metallurgy, Heat Treatment, Casting, and Forming;
Principal Reports of the Conference, Moscow, Izd-vo AN SSSR, 1958, 497 P.

(part. A.U. Conf. on light alloys. 1958)

SOV/137-58-11-22355
Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 72 (USSR)

AUTHOR: Anoshkin, N. F.

TITLE: Possibilities for Increasing Reductions in the Cold Rolling of Aluminum
(O vozmozhnosti uvelicheniya obzhatiy pri kholodnoy prokatke alyuminiya)

PERIODICAL: V sb.: legkiye splavy. Nr 1. Moscow, 1958, pp 447-452

ABSTRACT: The major obstacles in the way of rolling (R) at greater drafts is increase in rejects due to thickness shortcomings and the appearance of corrugations (or surface ripples) on the strip. Fluctuation in strip thickness is due to unevenness in billet thickness, uneven delivery of lubricant to the contact area, fluctuation in R speed, unevenness in front and rear tension in the R process, and lack of uniformity of the mechanical properties of the billets. Rejects due to thickness problems have been substantially reduced or completely eliminated by the use of an automatic micrometric thickness control. Ripples appear owing to variations in unit pressure and, as a result thereof, differences in roll flattening due to lengthwise variations in the coefficient of friction because of nonuniform

Card 1/2

SOV/137-58-11-22355

Possibilities for Increasing Reductions in the Cold Rolling of Aluminum

lubrication of various portions of the strip. Increase in reduction shifts the point of thermal equilibrium toward the higher temperatures, since there is an increase in the thermal strain effect and in the time of contact between the metal and the rolls, which should be taken into consideration when rolls are shaped for rolling at large drafts. Reduction in roll temperature may be attained only by means of intensive external cooling or a combination of internal and external cooling of the rolls.

P. B.

Card 2/2

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ACCESSION NR: AP5017603

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NR REF SOR: 003

OTHER: 001

Card 3/3

ACC NR: AP7001459

(A)

SOURCE CODE: UR/0413/00/000/021/0603/0203

INVENTOR: Gurevich, S. M.; Blashchuk, V. Ye.; Kulikov, F. R.; Persidskiy, A. S.;
Kushnirenko, N. A.; Anoshkin, N. P.; Moroznikova, S. V.

ORG: none

TITLE: Electrode wire for welding titanium alloys. Class 49, No. 188278

SOURCE: Izobreteniya, promyshlennyye obrastay, tovarnyye znaki, no. 21, 1966, 203

TOPIC TAGS: titanium alloy, ^{metal} alloy welding, titanium alloy electrode wire

ABSTRACT: This Author Certificate introduces a titanium alloy electrode wire which contains aluminum, iron, chromium, silicon, and boron. To increase the strength and ductility of welds in alloy sections up to 25 mm thick, the wire contains 1.4--1.6% zirconium while the content of other components is set as follows: 1.8--2.0% aluminum, 2.5--2.7% iron, 0.2--0.4% chromium, 0.1--0.15% silicon, and 0.05% boron. (ND)

SUB CODE: /1/ SUBM DATE: 28Jul65/ ATD PRESS: 3110

Cord 1/1

UDC: 621.791.042.2

ACC NR: AP7001458

(A)

SOURCE CODE: UR/0413/66/000/021/0202/0202

INVENTOR: Kulikov, F. R.; Gurevich, S. M.; Anoshkin, N. F.; Moroznikova, S. V.; Blashchuk, V. Ye.; Kushnirenko, N. A.; Persidskiy, A. S.

ORG: none

TITLE: Electrode wire for titanium-alloy welding. Class 49, No. 188277

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 202

TOPIC TAGS: electrode wire, titanium alloy, titanium alloy welding

ABSTRACT: This Author Certificate introduces a titanium-base electrode wire which contains 3.5—4.5% aluminum and 2.0—3.0% vanadium, with 1.4—1.6% zirconium added to improve the weld ductility. [ND]

SUB CODE: 13, 11/ SUBM DATE: 28Jul65/ ATD PRESS: 5110

Cord 1/1

UDC: 621.791.042.2

9.9845

26.2311

37461

S/057/60/030/012/008/011
B019/B056

AUTHORS: Anoshkin, V. A., Golant, V. Ye., Konstantinov, B. P.,
Poloskin, B. P., and Shcherbinin, O. N.

TITLE: Microwave Studies of Plasma With "Al'fa" Research
Installation

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1960, Vol. 30, No. 12,
pp. 1447 - 1455

TEXT: The authors studied plasma in the research installation "Al'fa" with 3-cm and 8-mm waves. Fig.1 shows a block diagram of the measuring arrangement. The studies were carried out at a voltage of 10 and 15 kv at the discharge capacitors (capacity 4600 microfarads), field strengths of the longitudinal field of 180, 360, 540, and 720 oe, and pressures of the hydrogen atmosphere of $2 \cdot 10^{-3}$, 10^{-3} , and $2 \cdot 10^{-4}$ mm Hg. The results concerning the reflection and the passage of radiowaves through plasma were discussed in detail on the basis of oscillograms and diagrams. From the results obtained by the experiments described, the

Card 1/2

87461

Microwave Studies of Plasma With "Al'fa"
Research Installation

8/057/60/030/012/008/011
B019/B056

authors conclude that the collective motion of plasma has a complex character. The plasma effects irregular vibrations with frequencies not exceeding 10^5 cps. It first occurs near the chamber with a concentration of 10^{12} cm^{-3} , and later more in the interior. Under the conditions investigated, no continuous production of plasma over the entire cross section was observed. It was further found that near the chamber wall there exists a region, in which the electron concentration exceeds the original concentration ($4 \cdot 10^{12} \text{ cm}^{-3}$). At pressures of more than 10^{-3} mm Hg and at certain values of the magnetic longitudinal field the breakup of plasma has an ordered character. The breakup has a duration of about 0.5 to 2 microseconds. There are 10 figures and 5 Soviet references.

Physico-Techn. Inst. USSR. Ser. No. 197
Photophysical Apparatus.

Card 2/0

2

AKHMETOV, M.M.; ANOSHKIN, V.V.; DROZDOVSKIY, N.N.; KNYAZEV, V.L.;
GAZIZOV, Kh.Kh.

Effect of current strength on the internal time drift from
wear of electric short-delay detonators. Trudy Inst.gor.dela AN
Kazakh.SSR 8ul02-106 '61. (MIRA 15:4)
(Detonators)

AKHMETOV, M.M.; ANOSHKIN, V.V.; DROZDOVSKIY, N.N.; SMIANOVA, A.V.

Modeling short-delay blasting. Trudy Alt. GNNII AN Kazakh. SSR 15:
38-42 '63.
(MIRA 17:3)

AKHMETOV, M.M.; ANOSHKIN, V.V.; DROZDOVSKIY, N.I.; VALEGZHANIN, V.V.;
FILIPPOV, N.I.; KNYAZEV, V.L.; SHIRNOVA, A.M.

Short-delay blasting in mines of the Leninogorsk Complex Ore
Combine. Trudy Alt. GMINII AN Kazakh. S3R 15:43-47 '63. (MIRA 17:3)

AKHMETOV, M.M., kand. tekhn. nauk; ANOSHKIN, V.V., gornyy inzh.;
DROZDOVSKIY, N.N., gornyy inzh.; SHAMSUTDINOV, R.N., gornyy inzh.;
RUDAKOV, N.F., gornyy tekhnik; KNYAZEV, V.L., tekhnik

Results of testing electric detonators with a delay interval of
15 msec. Gor. zhur. no.5:38-39 My '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy gornometallurgicheskiy
institut tsvetnykh metallov (for all except Knyazev). 2. Lenino-
gorskiy polimetallichесkiy kombinat (for Knyazev).

ANOSHKIN, Ya., inzh.

Soil concrete facings of training structures. Rech. transp.
24 no.7:32-34 '65. (MIRA 18:8)

1. Tsentral'nyy nauchno-issledovatel'skiy institut ekonomiki
i ekspluatatsii vodnogo transporta.

ANOSHKIN, Ye.

~~Kemodeling a small meat plant. Mias. Ind. SSSR 29 no.2:32-33
'58.~~ (MIRA 11:5)

1. Karasukskiy myasokombinat.
(Karasuk--Packing houses)

AMOSH KINH, A-A.

RECORDED AND INDEXED

12

The vitamin C content of milk and its synthesis during lactic fermentation. O. K. Pallecchia and A. A. Amoshina. *Microbiology*, U. S. S. R., 6, 787 (1937). *Chem. Zentral.* 1938, I, 450 (1938). Data on the occurrence of vitamin C in milk are in part reviewed. The vitamin C content of Levingrad whole milk and the change in it under the action of heat and during lactic fermentation were investigated. The vitamin C content of the milk amounted to 9.2-28.4 mg./l. and averaged 16.5 mg./l. Heat tends to destroy the vitamin. In pasted milk 6.85 mg./l. of vitamin C was found, in sterilized milk 6.90 mg./l., and in boiled milk or milk pasteurized at 95° 7.5-10 mg./l. In most cases, during lactic fermentation the vitamin C destroyed by the action of heat is regenerated. Various lactic acid cultures have a specific effect on the vitamin C content of the milk. *Streptococcus* & *Streptomyces* do not change the vitamin C content during souring while certain strains even destroy the vitamin right at the beginning of the process. Aroma cultures of *Streptococcus* & *Streptomyces* regenerate the vitamin C content often up to the anti-*anti*-present in the raw milk. The majority of the bacterial forms do not change the vitamin C content in the sour milk. In some lactic acid bacteria, however, the ability to synthesize vitamin C was observed, the soured milk containing an av. of 47 mg./l. of vitamin C and sometimes

as much as 90 mg./l. The high vitamin C content of a culture designated as *Lactobacillus* P7-24 was related to its high acidity. In general the vitamin C content increases with the acidity. No enrichment of the vitamin C content of the bacterial cells occurs. The increase in vitamin C is rather in the milk, where it can be seen after pcpn. of the protein, which carries the bacteria down with it. The vitamin C content of the soured milk reaches a max. the 2nd to 4th day of fermentation, after this the destruction of vitamin C begins. The addition of sugar, mannitol or glycerol is without influence on the formation of vitamin C. In lactic-free milk the formation of vitamin C is reduced under the influence of fermentation with *Lactobacillus* P7-24. However, the addition of 1% of beer wort brings the vitamin C content up to that of normal milk. In operation, it is recommended that milk pasteurized at 65° be fermented with a mixed culture after the addition of 6.8% sugar, 1% of the streptomycin-lacto-24 culture, and 2% of a special culture of lactic acid bacteria. (Further details are not given.) Fermentation on souring at 40° for 24 hrs., then at room temp. With an acid degree of 24° T, the vitamin C content reaches 40-40 mg./l. This fact, testing of the antiseborbic properties substantiate the statement that such properties are due to the vitamin C exclusively. M. G. Shcher

AVAILABILITY - BIBLIOGRAPHICAL LITERATURE CLASSIFICATION

APR 1971, L. A.

Normal Acidophilous Flora of the Intestines, thick ferment starch, G.Y.Palladina,
T.A.Krotova, V.A.Maryastvich, A.A.Anokina, Institute of Food Transfusion,
Mikrobiologiya, Vol 17, No 4, 19 pp., Jul/Aug 47.

Refers to many unsatisfactory studies of subject. Directs own studies on possibility
of promoting acid formation by intestinal microflora, in which weak fermentative
activity was observed. In process of transformation of various cultures, determined that
that a transformation of lactic acid bacteria series frequently produced a positive
accumulation of acidity in starch culture media. However, there intestinal lactic
bacteria S or B.acidophilus, or Bacteria bulgarium from milk, produced identical
results. Gives four tables of experimental data. Dated 31 June 47.

b/ag71

PALLADINA, O.K., doktor biol. nauk; ANOSHKINA, A.A.; STEPANOVA, K.S.;
BUKHMAN, N.D.; ZAPOL'SKAYA, N.A.

Formulas for margarine based on physiological needs. Masl.-zhir.
prom. 24 no. 6:13-16 '58. (MIRA 11:?)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov(for
Palladina, Anoshkina, Stepanova). 2. LNISOI (for Bukhman, Zapolskaya).
(Margarine)

PALLADINA, O.K., ANOSHKINA, A.A.

Stable and highly active starters for sour milk products [with summary in English]. Mikrobiologija 27 no.38377-386 My-Je '58
(MIRA 11:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut shirov,
Leningrad.

(LACTIC ACID BACTERIA)

LEVSH, I.P.; EL'GOMT, V.M.; ANOSHKINA, O.M.; BELYAYEVA, T.V.

Dynamics of the drying of Angren black clay. Uzb.khim.
zhur. no.5:79-83 '61. (MIRA 14:9)

1. Sredneaziatskiy politekhnicheskiy institut.
(Angren—Clay—Drying)

PERKOVSKAYA, Yu.B.; ANOSHINA, N.P.; SUKHANOVA, I.M.

Application of hydrochemical methods for the preparation of compounds
from rare-earth elements. Prom.khim.reak. i osobo chist.veshch. no.2:
27-30 '63. (MIRA 17:2)

L 10830-63

ACCESSION NR: AP300C755

EPR/EPE(c)/EWP(j)/EWT(m)/BDS--AFFTC/ASD--Pr-h/Ps-h/Pc-h...RM/WW
S/0020/63/150/C03/0608/0611

73

72

71

AUTHOR: Teytel'baum, B. Ya.; Yagfarova, T. A.; Anoshina, N. P.; Naumov, V. A.TITLE: Multiple investigation of the crystallization of polychloroprene rubber
Nairit

SOURCE: AN SSSR. Doklady, v. 150, no. 3, 1963, 608-611

TOPIC TAGS: crystallization, polychloroprene rubber, elasticity, crystallinity

ABSTRACT: The crystallization process in Nairit was studied by thermo-mechanical, thermographic and X-ray methods. The deformation of freshly-prepared polymer faded out (indicating crystallization) in 15 minutes at 0° , in 2 hours at room temperature. Thermomechanical curves showed maximum crystallinity for unheated samples and maximum elasticity on heating to 50° and holding at room temperature for one hour, elasticity decreasing with prolonged holding. The plateau of the peaks in a thermogram is dependent on degree of crystallinity. Thermomechanical curves can be used to evaluate degree of crystallinity. Supplementary X-ray analyses are necessary to determine absolute percentage of crystallization. The kinetics of Nairit (and other elastomers) crystallization can be studied by a combination of these methods. Orig. art. has: 4 figures.

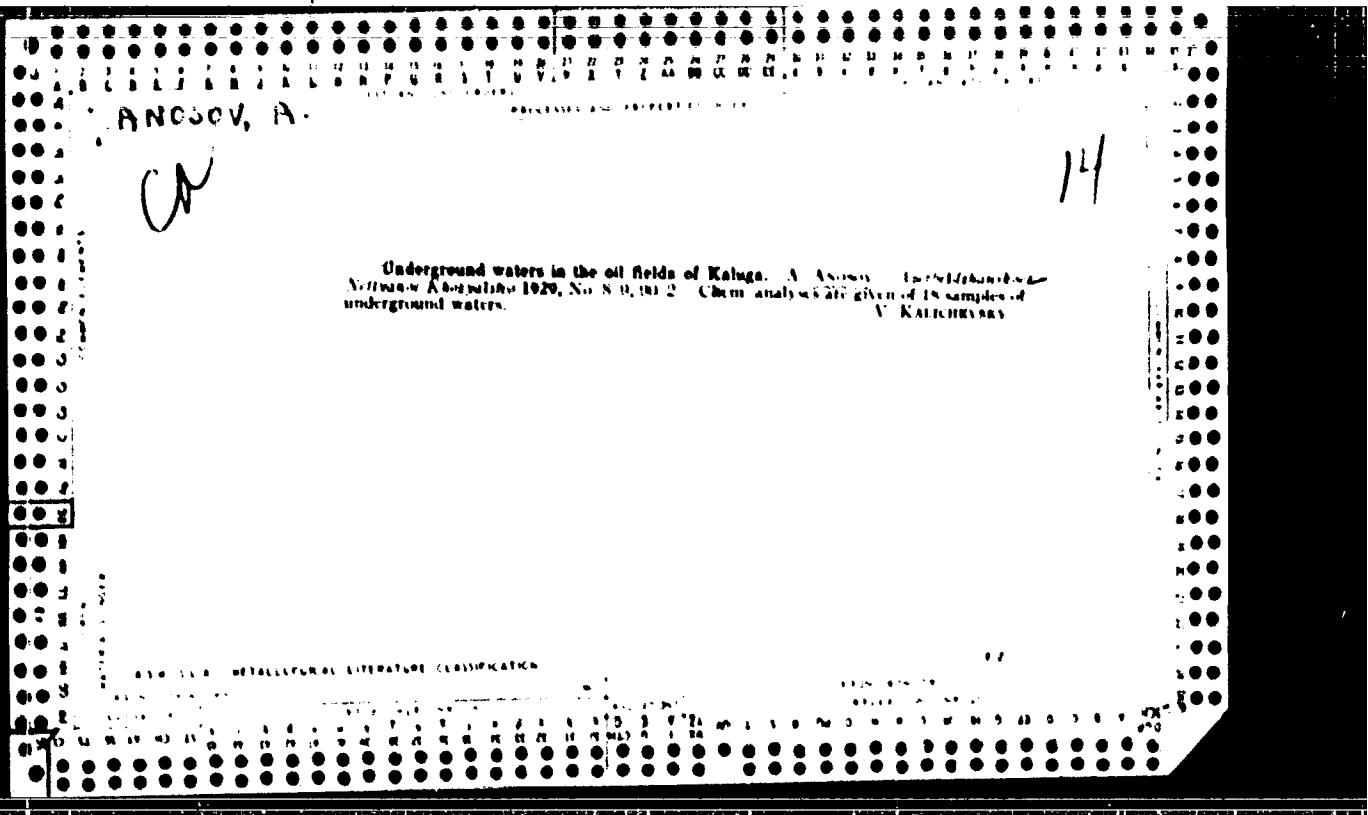
Card 1/2

ASSOCIATION: Institute of Organic Chemistry of Academy of Sci.

BRUDNAYA, A., kand. sel'skokhoz. nauk; ANOSKINA, N.

Detecting the bean weevil. Zashch. rast. ot vred. i bol. 10
no. 9:37-38 '65.
(MIRA 18:11)

1. Vsesoyuznyy institut zerna,



SOURCE: Ref. zh. Fizika, Abt. B1580

Figure 1. Effect of temperature on the electrical conductivity of

1990 (1991), 11, 1, 1-2, Pakawski, *Analysing Yeast Estuaries*, 1-17.

ANSWER TO THE CHIEF QUESTIONS

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APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000101710009-2"

ACCESSION NR: AR4046547

the foreign ions cease to participate in the conflictive. The
foreign ions will leave.

Line 2/2

ANOSOV, A.M.; VIKTOROV, A.A.; SOLOV'YEV, S.O.; OKRASIMOV, N.S., redaktor;
POLIKARPOV, M., redaktor; KONYASHINA, A., tekhnicheskiy redaktor

[Collection of fire prevention regulations] Sbornik rukovodis-
chikh dokumentov po pozharnoi profilaktike. Moskva, Izd-vo
Ministerstva kommunal'nogo khozianstva RSFSR. Vol.2. 1955. 535 p.
(MIRA 9:1)
(Fire prevention--Law and regulations)

ANUSOV, A.M., zhoyshohik

Every miner can work in such a way. Ugol' Ukr. 3 no.1:27-
28 Ja '59. (MIRA 12:1)

1. Shukhta im. Karla Marksya tresta Orishonikidzengol'.
(Coal mines and mining--labor productivity)

THURS 1
1962

REFERENCE LIBRARY OF THE TECHNICAL UNIVERSITY

AID 307 - 1

Call No.: TJ320.K37

Authors: POLYAKOV, V. S., KUDRYAVTSEV, V. N., SUBAKOV, R. P.,
ANUSOV, A. S., BARBASH, I. D., MYAGKOV, V. D.

Full Title: MACHINE ELEMENTS

Transliterated Title: Detali Mashin

Publishing Data

Originating Agency: None

Publishing House: State Publishing House for Machine Building and Shipbuilding
Literature (Mashgiz)

Date: 1954 No. pp.: 720 No. of copies: 50,000

Editorial Staff

Editors: Golovanov, N. F., Kandidat of Technical
Sciences

Fadeyev, N. K., Dotsent, Kandidat of
Technical Sciences

Editor-in-Chief: Kolchin, N. I., Professor,
Doctor of Technical Sciences

Others: None

Tech. Ed: None

Appraiser: Spitsyn, N. A.,
Professor, Doctor of
Technical Sciences

Members of the chain of
"Machine Elements" of the
Moscow Higher Technical
School, and of the Leningrad
Military-Mechanical Institute

Text Data

Coverage: This book gives basic information on the calculation and design of
machine elements, mechanical transmissions, and reducers. It consists

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SECRET SECTION

AM 307 - I

of the teaching material used for lectures in the Leningrad Polytechnical Institute im. Kalinin, M. I., and in other Universities in Leningrad. It is divided into four parts. Each of these parts is provided with separate listings of bibliography and sources. Diagrams, graphs, tables, etc.

This is a good textbook; however, nothing new or original could be found in it.

124-57-1-1208

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 165 (USSR)

AUTHOR: Anosov, A. S.

TITLE: Application of Vector Diagrams to the Calculation of the Resonance Oscillations of a Beam Subjected to an Endurance Test (Primene-niye vektornykh diagramm pri raschete rezonansnykh kolebaniy balki, podvergayemoy ispytaniyu na vynoslivost')

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1954, Nr 3, pp 87-102

ABSTRACT: An endurance test of large structural elements was undertaken to obtain data on their endurance strength. The tests were conducted on a special testing machine which was designed and constructed at the Leningrad Polytechnic Institute. The specimens, consisting of a welded box beam, were tested for pure transverse bending (by attaching to its ends specially dimensioned mass-loads) relative to the dynamic loads arising under resonance conditions, which were brought about by means of mechanical pulsating devices. The stresses in the beam were deduced from the amplitudes of its oscillations which, of course, depend greatly on the closeness of the degree of approximation to the resonance condition. A system free of resistance and one including the presence of a viscous resistance

Card 1/2

124-57-1-1208

Application of Vector Diagrams to the Calculation (cont.)

acting on the loads are examined, also the case of frictional resistance of the loads along the runner guides. Resonance curves for the system under examination are constructed under the assumption of a total absence therein of any resistance forces, and also for the presence of such forces therein.

1. Structures--Stability Bibliography

B. K. Karapetyan

Card 2/2

ANOSOV, A. S.

USSR/Engineering - Plastic friction bearings

Card : 1/1

Authors : Anosov, A. S., Cand. of Tech. Sciences, Docent; M. I. Kalinin Polytechnical Institute at Leningrad

Title : Experimental determination of the coefficients of friction on bushings of pressed-wood particles

Periodical : Vest. Mash. 34/5, 10 - 15, May 1954

Abstract : The development of the use of plastics for friction bearings is recounted, and their use is recommended in view of the abundance of forests in Russia and the fact that through the use of metal bearings and worm gears 30 per cent of scarce antifriction metals had been lost. Attention is called to the fact that plastics do not scratch journals, are easily machined and economize on lubricants. The author lists nine points in favor of plastic bearings, including the reduction in weight. Illustrations; drawings. One German, one English and four Russian references, latest 1952.

Institution :

Submitted :

AID P - 4306

Subject : USSR/Engineering

Card 1/1 Pub. 128 - 6/26

Authors : Anosov, A. S., Kand. Tech. Sci., Dotsent, and R. I. Gavrilov, Engineer (Leningrad Polytechnical Institute im. M. I. Kalinin)

Title : Comparative tests on friction of laminated wood-plastic materials of two kinds.

Periodical : Vest. mash., #3, p. 25-29, Mr 1956

Abstract : The Central Scientific - Research Institute for Veneers and Furniture (TsNIIFM) has produced a new laminated wood-plastic material DSP-B consisting of a veneer or plywood saturated in "Industrial 45" mineral oil. This new plastic material has been subjected to comparative tests on friction with the previously-used DSP plastic material. The results of those tests are reported. Charts, photo, 3 references, 1948-1954.

Institution : None

Submitted : No date

SOV/122-58-8-8/29

AUTHOR: Anosov, A.S., Candidate of Technical Sciences, Doctor

TITLE: On the Need to Modify the Bore Diameters in Shaft Couplings (O Neobkhodimosti izmeneniya diametrov otverstiy v privodnykh muftakh)

PERIODICAL: Vestnik mashinostroyeniya, 1958, Nr 8, pp 26-27 (USSR)

ABSTRACT: Soviet standards (GOST 5006-55 and others not specified) covering several types of widely used shaft couplings have been compared for the torsional shear stress of the shaft determined by the coupling bore size. The stresses thus correlated for different coupling sizes vary within each type, sometimes by a factor of 8 and even 10. In addition, there are large differences between coupling types. All told, the lowest stress postulated is 42 kg/cm^2 (in a "Bibby"-type coupling) and 2140 kg/cm^2 (in a transverse-bolted coupling). The main reason for these unjustifiable discrepancies is the connection between the coupling size and the driving

Card1/2

ANOSOV, A.S.[deceased]; BARIASH, I.D.; KOMKOV, V.N.; KOSTAREV, V.N.;
KUGUSHEVA, V.M.; POLYAKOV, V.S., prof., red.

[Laboratory manual for a course on machine parts] Uchebnoe
posobie k laboratornym rabotam po kursu detalei mashin. 2. izd.
dop. i perer. [By A.S.Anosov i dr. Leningrad, Leningr. poli-
tekhn. in-t im. M.I.Kalinina, 1964. 55 p. (MIRA 1814)]

ANCSOV, A.S. [deceased]; KOS'KIN, V.N.

Elastically damping gear clutch. Truly IPI no.254:14-17 '65.
(MIRA 19:1)

AKSUV, A. V.

42573 Freidchesstremniiki rezhisjor Zemlecherynya i giprovitechnik rekt. naivraly
Dyla Istorii Osnovnykh. Sjot na lekach Volzhskogo Masscina Vajreccy Sidrotechniki
Svoleinykh Rek. Sjornik Iz r. Trudov Osnovopelzhitkov Ros. Maslovyy Idrotelchniki
N. 1948, S. 65-92

ANOSOV, A.V.

Dvornik nashego goroda (Yardman of our city). Moskva, Ministerstvo kommunal'nogo
khoziaistva RSFSR, 1954. 40 p.

SO: Monthly List of Russian Accessions, Vol 7, No. 8, Nov. 1954

ANOSOV, Alekseandr Vladimirovich; KHACHATUROV, V.V., red.; TIKHONOVÄ, Ye.A.,
tekhn. red.

[Ship handling] Upravlenie sudami. Moskva, Izd-vo "Morskoi trans-
port," 1961. 271 p. (MIRA 14:11)
(Ship handling)

ANDREEV, A. I.
ANOSOV, A. J.

"Determination of Heats of Dhydration by Heating Curve Method." Berg, L. G., and
Anosov, A. J. (p. 41)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1942, Vol 12, No 1-2.

ANOSOV, D.

Way of work of Vladimir Province firemen. Pozh. delo 7
no. 1:6-8 Ja '60. (MIRA 14:2)
(Vladimir Province—Fire departments)

ROTTMAN, Miron Yakovlevich; ANOSOV, D.M., redaktor; ALTUF'YEVA, A.M.,
redaktor izdatel'stva; KONYASHINA, A., tekhnicheskiy redaktor

[Evacuating people from factories and public buildings in case of
fire] Evakuatsiya liudej iz promyshlennyykh i greshdanskikh zdanii
na sluchai pozhara. Moskva, Izd-vo Ministerstva kommunal'nogo
khoziaistva RSFSR, 1956. 133 p. (MIRA 10;1)
(Fire escapes)

M.
ANOSOV, D., inzh.; VIKTOROV, A.

Fire-prevention measures for rural construction sites. Sel'.
stroj. 9 no.2:20-21 Mr-Ap '54. (MIRA 13:2)
(Fire prevention)

ANOSOV, D.

Volunteer fireman of the capital's province. Pozh.delo 7
no.6:6 Je '61. (MIRA 14:6)
(Moscow Province--Fire extinction--Societies)

67498

SOV/155-59-1-1/30

~~16(1) 16.26.00~~AUTHOR: Anosov, D.V.

TITLE: Multidimensional analogue of a Theorem of Hadamard

PERIODICAL: Nauchnyye doklady vyschey shkoly. Fiziko-matematicheskiye nauki, 1959, Nr 1, pp 3 - 12 (USSR)

ABSTRACT: Hadamard [Ref 1] considered the transformation of the plane into itself

$$x \rightarrow \lambda x + \varphi(x,y) , \quad |\lambda| > 1$$

$$y \rightarrow "y + \psi(x,y) , \quad 0 < |"y| < 1 ,$$

where φ and ψ denote the terms of higher order, and showed that this transformation has two invariant curves through the coordinate origin.

The author generalizes this result to the multidimensional case and besides he investigates the smoothness of the invariant manifolds.

The author considers the mapping

$$T : \begin{pmatrix} x \\ y \end{pmatrix} \rightarrow \begin{pmatrix} x' \\ y' \end{pmatrix} = \begin{pmatrix} Ax + \varphi(x,y) \\ By + \psi(x,y) \end{pmatrix} ,$$

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67498

Multidimensional Analogue of a Theorem of Hadamard SOV/155-59-1-1/30
the graphical representation of a certain function $y = f_0(x)$.
Points $\begin{pmatrix} x \\ y \end{pmatrix}$ for which $T^k \begin{pmatrix} x \\ y \end{pmatrix}$ leaves H_0 for $k \rightarrow -\infty$, while
 $T^k \begin{pmatrix} x \\ y \end{pmatrix} \in H_0$ for $k > 0$ and $T^k \begin{pmatrix} x \\ y \end{pmatrix} \rightarrow \begin{pmatrix} 0 \\ 0 \end{pmatrix}$ for $k \rightarrow +\infty$.
These points form an m-dimensional manifold H_0 being the
graphical representation of a function $x = h_0(y)$.
The functions f_0 and h_0 satisfy the condition $|f(x_0 + h) - f_0(x)| < \delta|h|$, where $\delta \rightarrow 0$ for $|x|, |x + h| \rightarrow 0$ and
analogously for h_0 . If φ and ψ are smooth, then also f_0, h_0
do so.
The author thanks L.S. Pontryagin and Ye.F. Mishchenko for
the interest in the present paper.

X

Card 3/4

ANOSOV, D.V. (Moskva)

Equilibrium stability of relay systems. Avtom. i telem. 20 no.2:135-149
F '59. (MIRA 12:3)
(Automatic control)

84744

16.3400

S/038/60/024/005/002/004
C111/C222AUTHOR: Anosov, D.V.TITLE: Averaging in Systems of Ordinary Differential Equations With Quick-
ly Oscillating SolutionsPERIODICAL: Izvestiya Akademii nauk SSSR, Seriya matematicheskaya, 1960,
Vol. 24, No. 5, pp. 721 - 742

TEXT: The author considers

(1.1) $\epsilon \dot{x} = f(x, y) + \epsilon X(x, y, \epsilon), \quad y = Y(x, y, \epsilon),$

where $x = (x_1, \dots, x_n)$, $y = (y_1, \dots, y_n)$; f is a smooth function; $Y(x, y, \epsilon)$ and $Y(x, y, \epsilon)$ are defined in $\Gamma \times I$, where $I = [0, \epsilon_0]$;X and Y are continuous in (x, y, ϵ) and everywhere in $\Gamma \times I$ they have
derivatives with respect to x and y, which are also continuous in (x, y, ϵ) . \checkmark
The derivatives are denoted by :

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Averaging in Systems of Ordinary Differential Equations With Quickly Oscillating Solutions

S/038/60/024/005/002/004
C111/C222

(similarly for X, Y).

The following assumptions are made:

1) The system

$$(1.6) \quad \dot{x} = f(x, y_0)$$

(y_0 - parameter, $x, y_0 \in \Gamma$) has $k < n$ first integrals $H_1(x, y_0) = \text{const}, \dots, H_k(x, y_0) = \text{const}$, where H_i has all derivatives of first and second order with respect to (x, y) and they are continuous. The matrix H_x ($H = (H_1, \dots, H_k)$) has the rank k everywhere in Γ . Likewise for H_y .

2) Every cut Γ^{y_0} of the domain Γ with the subspace $y = y_0 = \text{const}$ consists of $(n-k)$ -dimensional bounded closed surfaces $H_i(x, y_0) = h_i$ ($i = 1, \dots, k$).

3) The system (1.6) has an integral invariant $I(x, y)$ being a smooth positive function of x, y in the whole Γ .

4) Let p be the mapping $(x, y) \rightarrow (h, y)$, where $h = (h_1, \dots, h_k)$, $h_i = H_i(x, y)$.

Let $\Gamma_1 = p(\Gamma)$. Let

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Averaging in Systems of Ordinary Differential
Equations With Quickly Oscillating Solutions

3/038/60/024/005/002/004
C111/C222

$H_{ix} = \left(\frac{\partial H_1}{\partial x_1}, \dots, \frac{\partial H_k}{\partial x_n} \right)$ and $V(H_{1x}, H_{2x}, \dots, H_{kx})$ be the volume of the hyperspace formed by the vectors H_{ix} . On the surfaces $p^{-1}(h, y)$ the invariant measure

$$(1.10) \quad d\mu = \frac{I(x, y)d\sigma}{V(H_{1x}, \dots, H_{kx})}$$

is defined, where $d\sigma$ is the usual Euclidean measure. It is assumed: For almost all $(h, y) \in \Gamma$, the system (1.6) - considered on the surface

$p^{-1}(h, y)$ - is metrically transitive.

From this it follows that for almost all $(x_0, y_0) \in \Gamma$ it holds

$$(1.11) \quad \frac{1}{T} \int_0^T \varphi(\tilde{x}(t), y_0) dt \rightarrow \bar{\varphi}(h_0, y_0) \text{ with } T \rightarrow \infty$$

where $\varphi(x, y)$ is an arbitrary function continuous in Γ , $\tilde{x}(t)$ denotes the solution of (1.6) with the initial values $\tilde{x}(0) = x_0$, $h_0 = (H_1(x_0, y_0), \dots, H_k(x_0, y_0))$ and

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Averaging in Systems of Ordinary Differential
Equations With Quickly Oscillating Solutions

S/038/60/024/005/002/004
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the initial conditions x_0, y_0 . Let $\bar{g}(t, x_0, y_0) = H(x(t, x_0, y_0), y(t, x_0, y_0))$; furthermore $\bar{g}_0 = H(x_0, y_0)$.

The content of the present paper consists of the proof of the theorem:
Let F be a measurable subset of the domain Γ being in a positive distance
from the boundary of the domain; $\phi = p(F)$. Let $\bigcup_{t \in [0, a]} \phi_t$ lie in a positive
distance from the boundary of Γ . Let $F_\delta(\epsilon)$ be the set of all (x_0, y_0) of F
for which $(x(t, x_0, y_0), y(t, x_0, y_0))$ is defined and

(1.19) $|g(t, x_0, y_0) - \bar{g}(t, g_0, y_0)| \leq \delta, |y(t, x_0, y_0) - \bar{y}(t, g_0, y_0)| \leq \delta$

holds for all $t \in [0, a]$. Then for the Euclidean measure it holds

(1.20) $\text{mes}(F \setminus F_\delta(\epsilon)) \rightarrow 0$ for $\epsilon \rightarrow 0$.

The proof consists of a metrical and an analytic part and bases on 9 lemmas.

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